# INTRODUCTION

"By March 8, 1994, each agency subject to this order shall report on its customer surveys to the President. As information about customer satisfaction becomes available, each agency shall use that information in judging the performance of agency management and in making resource allocations."
**Executive Order: Setting Customer Service Standards; September 11, 1993, Section 2**

In September 1993, the National Partnership for Reinventing Government (NPR) asked Federal agencies to reach out to their customers to determine how satisfied they were with the services provided to them by the United States Government. In response, Flight Standards Service of the Federal Aviation Administration followed the direction of the NPR's predecessor, Total Quality Management, and began asking its customers to provide feedback on their level of customer satisfaction through a Customer Satisfaction Survey. The survey enabled us, Flight Standards, to see ourselves through our customers 'eyes.

This initial 1993 survey consisted of a two-part customer survey. The first part of the survey focused on feedback from individual airmen about the service provided by the Flight Standards District Offices (FSDO). A postcard with seven core questions was used to collect customer input. Since this was the first time Flight Standards had conducted a survey of this sort, all district offices were briefed on the goals, objectives, and mechanics of the survey. In 1993, the total number of airmen, including pilots and non-pilots, was 1,224,795 (source: FAA/APO/U.S. Airmen Statistics). Table 1 shows that the number of airmen randomly selected to receive surveys was 185,479, and the number of responses, 26,334, for a 14.2 percent return rate. These statistics reflect the response rate for all participants. When only the number of pilots and designated pilot examiners was reviewed, the response rate dropped to less than 12 percent (11.8 percent).

## 1993 Customer Survey Return Rates

| SURVEY #1 | All FSDO Respondents | Pilots & Examiners | All CMO Respondents |
|---|---|---|---|
| Total Mailed | 196,303 | 159,619 | 1,150 |
| Total Undeliverable | 10,824 | 8,936 | 0 |
| Total Delivered | 185,479 | 150,683 | 1,150 |
| Completed & Returned | 26,334 | 17,723 | 357 |
| Return Rate | 14.2 % | 11.8 % | 31 % |

**Table 1**

The second part of the survey focused on the relationship that employees of 14 different air carriers had with Flight Standards personnel in their respective Certificate Management Offices (CMO). In preparation for completion of the survey, Flight Standards personnel gave briefings, similar to those provided to the FSDO's in the first part of the survey, to both representatives of air carrier management and employees of the CMO. Then, management officials of each air carrier distributed the postcard questionnaires to a select group of employees chosen based on their interaction with Flight Standards. The total population of recipients for this phase of the survey, as seen in Table 1, was 1,150 and the respondents, 357. This process proved highly successful. The second part of the survey yielded a 31 percent response rate, more than double the return rate of the first part.

Although limited in scope, this first survey in 1993 gathered important information. Flight Standards realized two major areas of concern among our customers: lack of standardization in both the level of service and the information provided by the FSDO's and difficulties in communication between FSDO employees and their customers. These results provided a basis to design a more comprehensive Customer Satisfaction Survey. In 1998, Flight Standards expanded the survey by developing enhanced and professionally designed questionnaires that solicited more detailed information in focused areas from our customers.

To emphasize the importance that Flight Standards is placing on customer service, the Customer Satisfaction Survey was included in both the Flight Standards Fiscal Year 1999 and Fiscal Year 2000 Business Plans. The goal was to conduct surveys of both the pilot and aviation maintenance technician (AMT) populations. The Business Plans are linked to the Flight Standards Strategic Plan that includes the Strategic Goal: *Promote Positive, Responsive and Focused Customer Relations*. The surveys reinforce the commitment we have to provide the highest level of customer service possible. This could not be accomplished more effectively than to use information provided by some of our major customers to improve our service quality.

There were 33,861 completed surveys that were returned to Flight Standards in 1998. Some of them could not be used because they were damaged or illegible. The legible responses numbered 32,338. This yielded an overall return rate of 35 percent.

With the focus expanded and indepth questionnaires prepared, the Customer Satisfaction Survey was mailed to 102,000 pilots and 136,000 AMT's in October 1998. Though both questionnaires were distributed at the same time, this report addresses only the findings based on pilot responses. Findings based on the AMT responses are forthcoming. The following sections of this report are a summary of the national findings of the pilot phase of the Flight Standards Customer Satisfaction Survey. Appendix I contains the actual questionnaire used to gather input from pilots. Appendix II contains the tables that summarize all results of the analysis of this input and from which the graphs presented in this report were derived.

The pilot survey included the six focus areas of *Aviation Information, Communication, Aviation Safety Program, Flight Reviews, Access to Information,* and *Accidents, Incidents and Compliance*. A total of 46 questions under the focus areas was designed to solicit "firsthand" information from pilots regarding their satisfaction with the customer service provided by Flight Standards.

The survey *was not* addressed to all registered pilots; rather, a random sample was chosen and stratified for size of population serviced by each field office. We assumed that the number of pilots who actually received questionnaires was 95,700, since the United States Postal Service returned the remaining 6,300 questionnaires to the FAA because of inaccurate or expired forwarding addresses. There were 33,861 completed surveys returned to Flight Standards yielding a 35 percent return rate. This translates statistically into a **99 percent confidence level,** meaning that we can be 99 percent sure that our results would be the same (plus or minus 1 percent) if we were to repeat the survey. Moreover, our return rate of 35 percent was similar to that of a customer index conducted by the NPR with only 260 randomly selected commercial and airline transport pilots (ATP). Published in 1999, the index yielded a rate of return of 30-35 percent.

## Statistics for 1993 and 1998 Surveys

| Overall Statistics | Total Population | Total Surveys Mailed | Total Surveys Delivered | Total Survey Response | % Survey Response |
|---|---|---|---|---|---|
| Pilots in 1993 | 665,069 | 159,619 | 150,683 | 17,723 | 11.8% |
| Pilots in 1998 | 618,298 | 102,000 | 95,400 | 33,861 | 35.5% |

**Table 2**

As shown in Table 2, the total population in 1998 was smaller than in 1993 by approximately 47,000 registered pilots. The total number of surveys mailed and delivered to addressees was also lower. However, the 1998 rate of return was more than triple the 1993 rate. There were 1,523 completed Customer Satisfaction Surveys that Flight Standards was not able to process for the second survey because of insufficient or incorrectly entered data. Therefore, the total number of pilot surveys available for analysis was 32,338. Figure 1 shows the progression from the whole population of pilots in 1998 to those pilots who returned the surveys used in the analysis discussed in the remainder of this report.

# Comparison of Total Pilot Population and Survey Responses

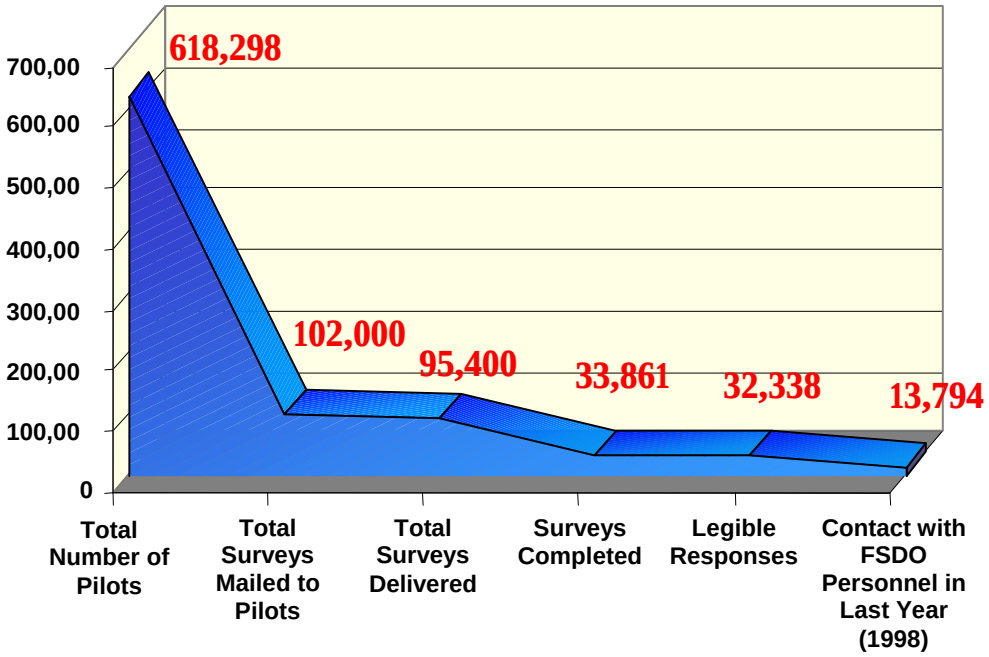



**Figure 1**

It was important to determine how our pilot respondents reflected the whole pilot population of certificate holders[1] (e.g., all of those who have been issued a pilot certificate). In order to evaluate this, we examined the data closely. Figure 2 shows how closely the respondent percentages were to those of the general pilot population. Only the students— who in 1998 were 16 percent of the pilot population— were underrepresented in the pilot respondents (4 percent).

[1]Flight Standards needed to see how closely our population of pilot respondents mirrored the total population of pilots contained in the Airman Certification Databases. Figure 2 shows the correlations. Statistics revealed that the percentage of the various certificate levels from the pilot respondents correlated highly with those of the general population (Correlation Coefficient = 0.98).

## Survey Respondents vs. Whole Pilot Population

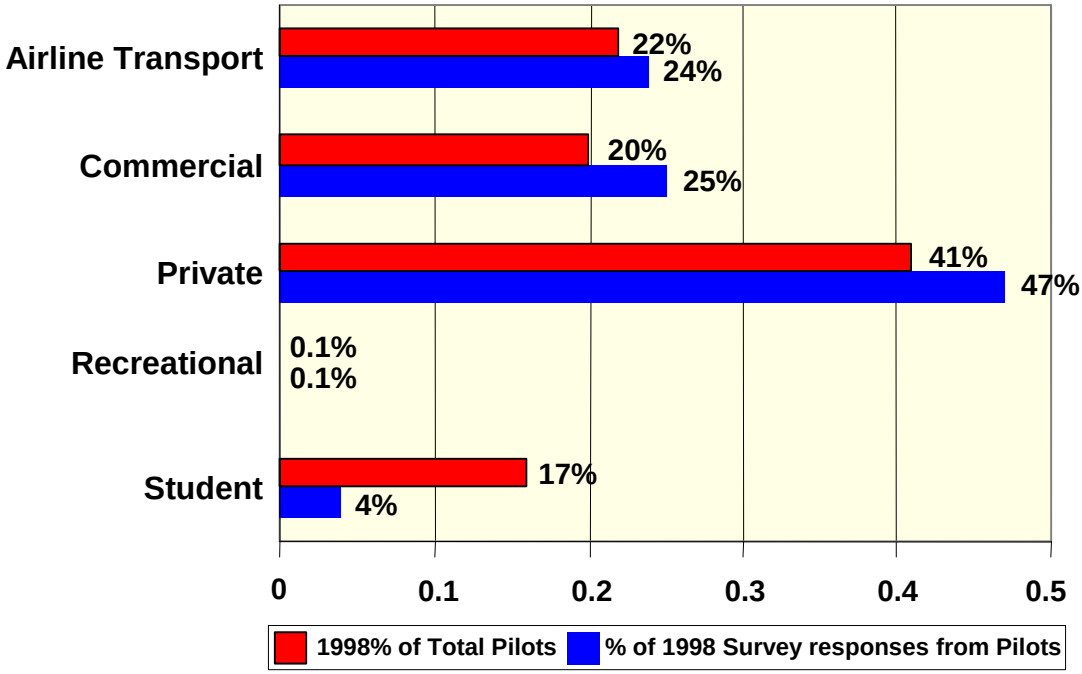



**Figure 2**

## AVIATION PROFILE OF THE RESPONDENTS

Though two separate focus areas in the Customer Survey, the data collected under *Aviation Information* and *Accidents, Incidents and Compliance* are related. In both of these areas, we asked the pilots to give aviation information about themselves that included the types of certificates they held, the reason for flying (either flying for hire or strictly for pleasure), the amount of flying they had done in their lifetime, and their history of accidents and incidents during the past year.

Survey responses enabled us to analyze and summarize data in a variety of ways. Pilots who flew as a source of income and those who flew as a hobby were equally represented in the survey responses. We assumed the customer service we provided could directly impact both the pilots' livelihoods and leisure. We expanded this assumption to include ownership. Thus, it is noteworthy to add that only slightly less than half of the respondents (42 percent) reported owning or co-owning an aircraft.

### Private vs. Commercial and ATP Pilot Respondents

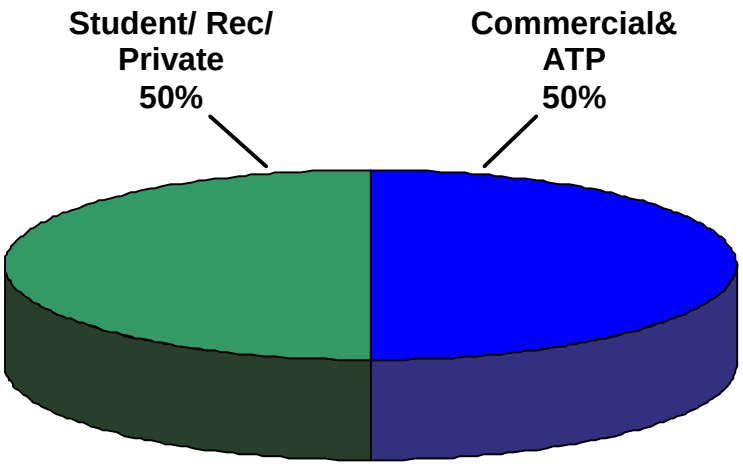



**Figure 3**

In addition to the categorizations mentioned above, the respondents were asked to record the highest level of pilot certification they held. These included student, recreational, private, commercial, and ATP. In Figure 3 above, respondents were divided almost equally between those who identified themselves as student, recreational, or private pilots (50 percent) and those who identified themselves as commercial and ATP (50 percent)[2]. Throughout the remainder of this report, we will refer to the first group as "Private" and the second group as "Commercial and ATP."

[2] Figures in the text will add to 100 percent. Sometimes, because of rounding, numbers and percentages in the charts will not match ***exactly*** those found in Appendix 2.

## Aviation Related Activities Performed by Respondents

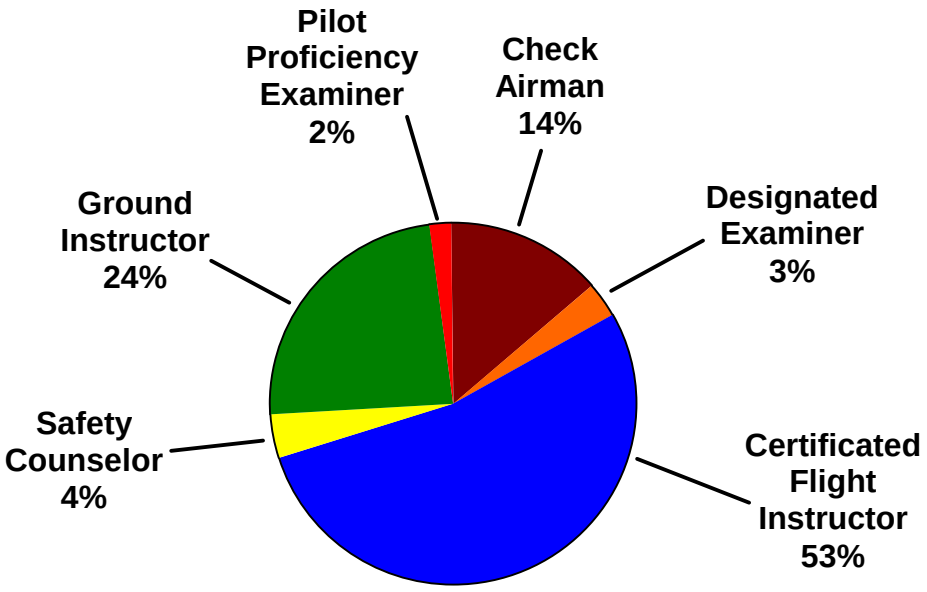



**Figure 4**

As illustrated in Figure 4, when asked what certificates they held, most of the pilots reported being Certificated Flight Instructors (53 percent) or Ground Instructors (24 percent). Figure 5 shows that 88 percent of the pilots flew airplanes (fixed wing aircraft) rather than rotorcraft, lighter than air aircraft, or gliders.[3]

[3] The question in the survey allowed more than one answer. Consequently, a pilot may have reported flying both an airplane and a glider.

## Types of Aircraft Flown by Pilot Respondents

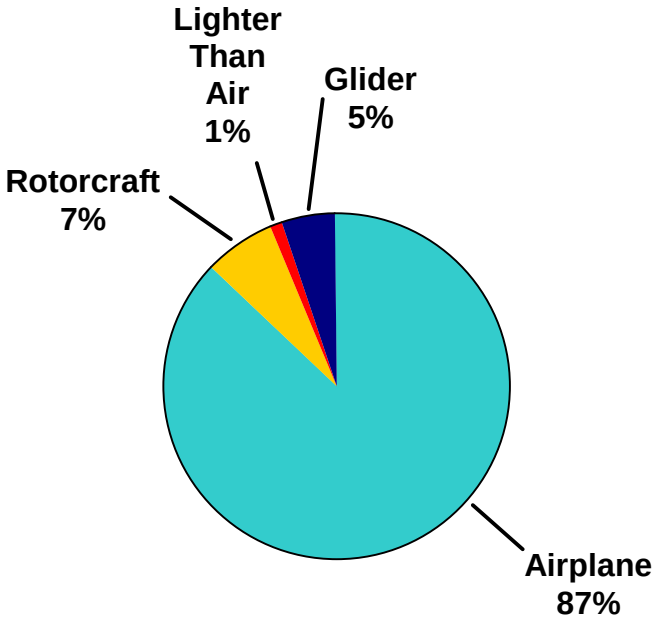



**Figure 5**

Even though a variety of pilots responded, a significant number reported having flown between 3,001-10,000 hours (20 percent) or more than 10,000 hours (14 percent). From this information, it was possible to conclude many of the respondents had a moderate to high level of experience[4]. Figure 6 depicts the lifetime hours flown while Figure 7 illustrates the number of hours flown only during the year 1998, with 20 percent of the respondents indicating that they had flown over 300 hours.

[4] The reader will notice that the increments of hours (e.g. under 100, 100-500, 501-1000, etc.) are not evenly spaced intervals. Rather than use regular increments of hours, we used the categories of hours in the survey questionnaire. Although irregular, the percentage of pilot response is statistically accurate.

# Lifetime Hours Flown

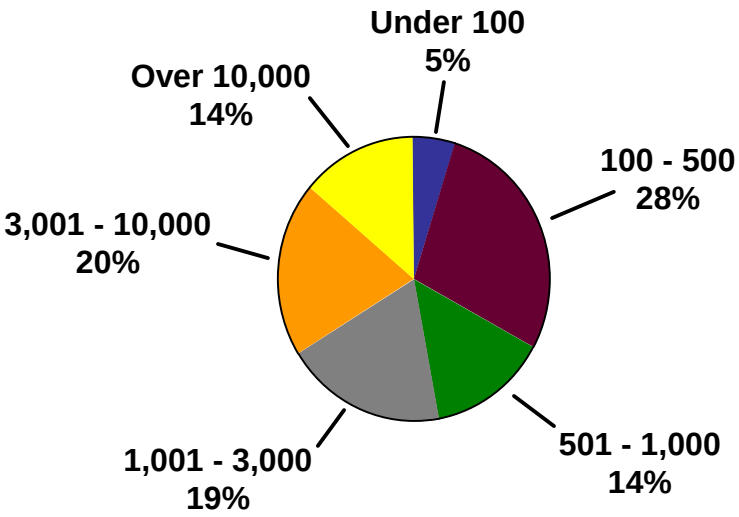



**Figure 6**

# Hours Flown by Respondents in 1998

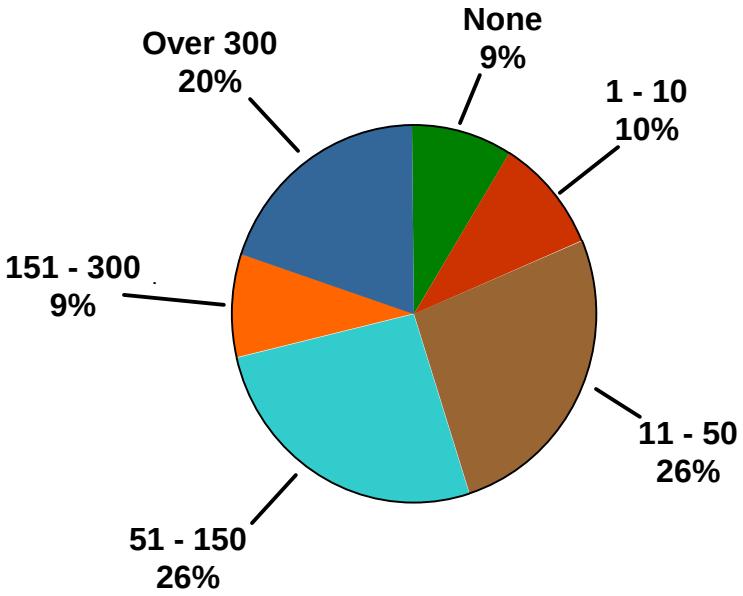



**Figure 7**

The survey asked, "If you have a Commercial or ATP certificate, do you fly for hire?" Of those who held Commercial or ATP certificates, 63 percent reported that they did receive compensation, while 37 percent reported themselves as not recovering compensation for flying. The 63 percent who reported themselves as holding a Commercial or ATP certificate and were compensated for flying represents 30 percent of the total respondents.

## Kinds of Operators for Which Commercial and ATP Pilots Fly

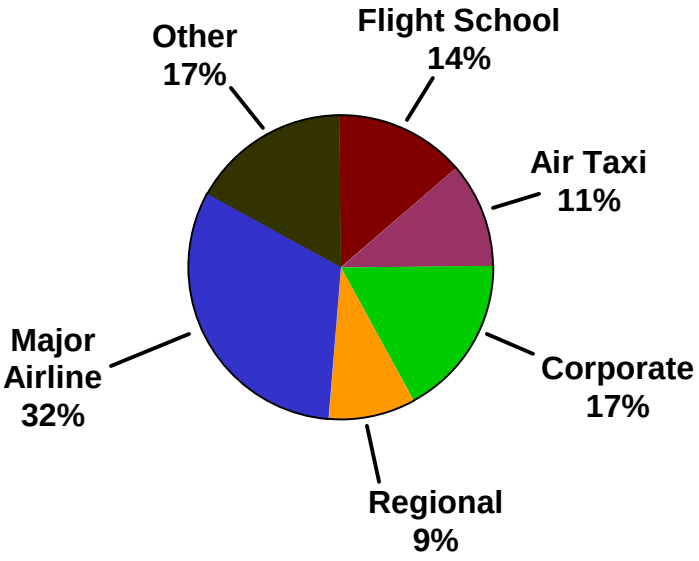



**Figure 8**

When this group was further analyzed, 33 percent of the pilots who held a Commercial or ATP certificate (which was approximately 11 percent of the total respondents) flew for a major airline, 14 percent for a flight school, 17 percent for an air taxi, 9 percent for a regional carrier, and the remaining 17 percent for corporate businesses[5] (Figure 8).

While striving to understand the profile of the respondents, Flight Standards examined questions from the focus area of *Accidents, Incidents and Compliance* regarding the accident and incident history of each respondent during the previous year. Flight Standards requested this information to ensure that a small number of "disgruntled" pilots did not unfairly sway the overall results of the survey. For example, if pilots who had been investigated for an accident or incident had responded to the survey in numbers disproportionate to the actual number in the total pilot population, then the results could have weighed negatively against

[5] The question in the survey allowed more than one answer. In other words, a pilot could fly for a flight school and an air taxi.

Flight Standards. It is important to note that the investigation of an accident or incident does not automatically place the pilot in a punitive situation. Although both investigation and enforcement are responsibilities of Flight Standards, the survey did not ask pilots to respond to questions concerning their enforcement history.

This being stated, our results did not yield a large enough response from this sector of the aviation community involved in accidents or incidents to change the survey outcome. One percent of all respondents, or 172 pilots, reported that they had been involved in an accident during 1998. Similarly, only 2 percent of the survey respondents, or 485 pilots, reported that they had been involved in an incident in 1998. Of this latter group, 91 percent had only one incident and only 47 pilots reported more than one incident.

# COMMUNICATION

## INTERACTION WITH FLIGHT STANDARDS AND ACCESS TO INFORMATION

While the Customer Survey instrument separated the two focus areas, *Communication* and *Access to Information,* we realized their close relationship and combined them for reporting purposes. Much of the communication or interaction with Flight Standards employees by our customers has always occurred as they seek information. Linking the two areas allowed Flight Standards to evaluate them more accurately from the customer's point of view.

## CONTACT WITH FLIGHT STANDARDS

In this summary analysis of information gathered under the two focus areas mentioned above, we concentrated on survey respondents who had the most recent contact with Flight Standards personnel. Although we always are concerned about the lasting impression that Flight Standards has made on any pilot, we assumed respondents who had contact with a Flight Standards office within the year prior to the survey would provide information most relevant to our current organization. For this reason, it was valid to concentrate attention on their responses as indicators of the customer service we currently provide. Since most respondents did complete the survey toward the end of 1998[6], the phrase "one year prior to this survey" is substituted in the remainder of this report with "1998."

Several questions in the survey were used as "filter" questions, meaning that the results of the answers to questions would be used in and of themselves to further analyze data. Question 10 in the survey was one such question. It stated, "In the last year, [e.g., 1998], how often have you had any contact with an FAA inspector[7] or your local office (FSDO)?" With the answers we obtained from that question, we were able to filter out those respondents who had contact with the FAA during 1998. Figure 9 illustrates this filter process.

Evaluating the responses to Question 10, we grouped any answer indicating one or more than one contact pilot and eliminated those reporting "no contact." Therefore, the response to this question indicated that 44 percent of the respondents reported having at least one incidence of contact with an aviation safety inspector or FSDO during 1998. Conversely, 56 percent, or 17, 596 respondents, had no contact within the last year. When we broke down this 44 percent of respondents with contact, we found that 31 percent of them had contact one time with an aviation safety inspector or the local FSDO; 37 percent had two or three occasions for contact; and 32 percent who had contact more than three times.

[6]Flight Standards began receiving completed surveys in November 1998 and continued receiving them well into 1999. For purposes of readability, however, "1998" will stand for the year preceding the completion of the survey.

[7] The survey questions used the term "FAA Inspector." Flight Standards employs aviation safety inspectors who provide the types of services addressed in the survey. Therefore, in this report the term aviation safety inspector is used.

# "Filter" Question Process

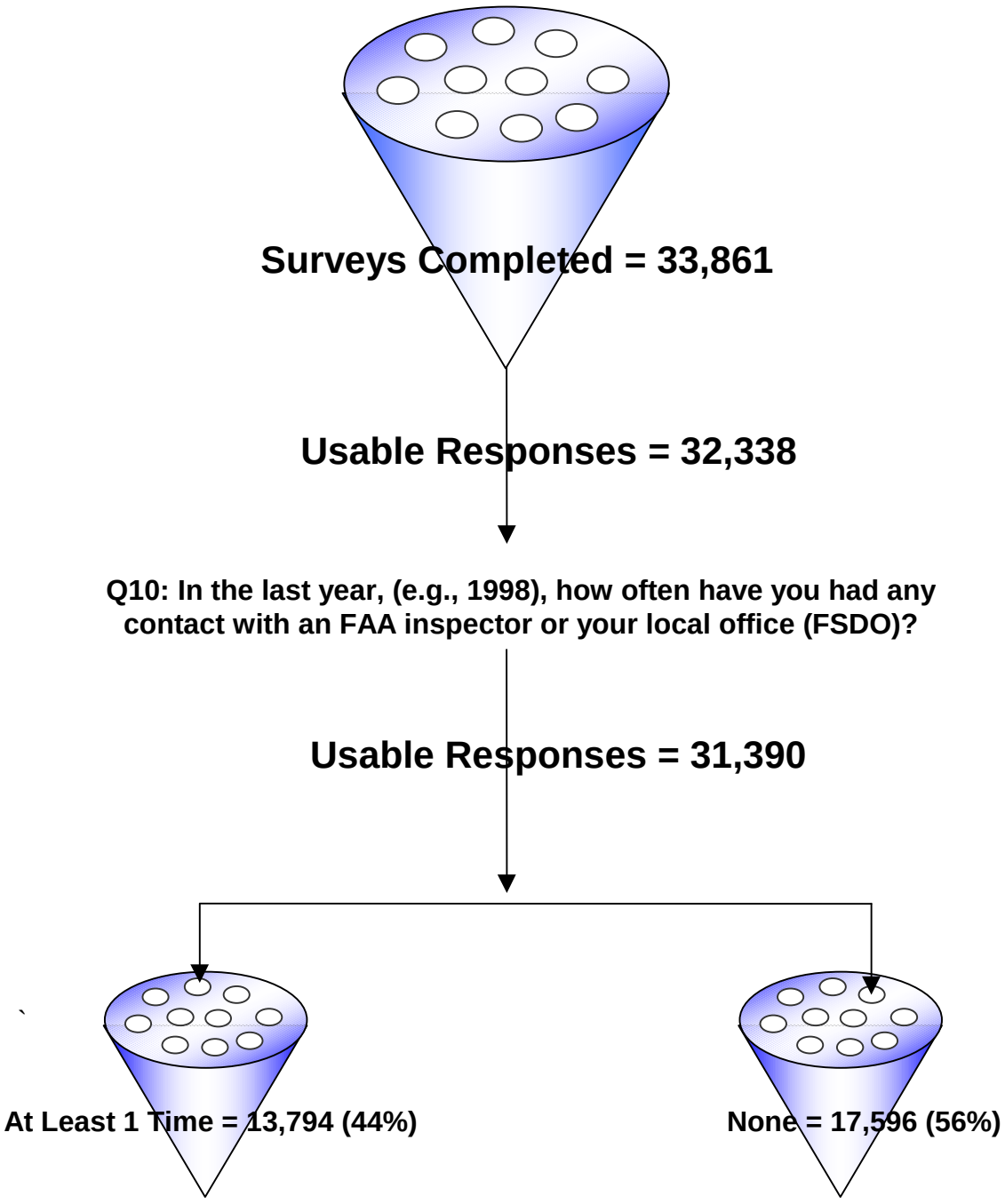



**Figure 9**

# Private vs. Commercial and ATP Pilots with FSDO Personnel Contact

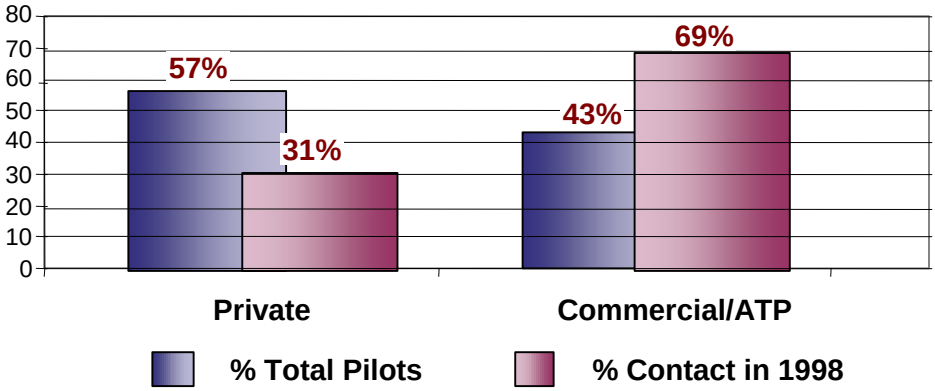



**Figure 10**

Figure 10 shows the composition of Private and Commercial and ATP pilots who had contact with a FSDO during 1998 in comparison to the total population of pilots. There was a large overrepresentation of Commercial and ATP pilots who had contact with the FAA in 1998 than was seen in the population as a whole (69 percent vs. 43 percent, respectively). Conversely, a large underrepresentation was seen in the Private pilots who had 1998 contact when compared to the pilot population as a whole (31 percent vs. 57 percent). Even though Commercial and ATP pilots constituted the majority, there were enough of the Private pilot respondents to provide a balance of opinions.

As Figure 11 illustrates, Flight Standards personnel most frequently communicated with the pilots through walk-in visits to a FSDO (21 percent), phone calls (31 percent) and interaction in the field (30 percent). This demonstrated the need for FSDO personnel to solve problems and answer questions at a moment's notice during the working day and be prepared to provide the highest level of customer service at all times.

The aviation safety inspector (or by extension, the FSDO) represents the entire FAA to each of his or her customers. Though it is impossible to be prepared for every question that may arise, whether in the field or in the office, it is always possible to be courteous. An overwhelming majority (89 percent) of the pilot respondents thought that Flight Standards personnel treated them with courtesy. Although this is an exceptionally high mark of approval, there is a reason to exercise prudence. Pilots overall gave the courtesy shown to them by a FSDO or an aviation safety inspector a high approval rating. Nevertheless, when we compared these pilots with those who had contact with Flight Standards during 1998, the latter group reported twice the amount of negative responses. Further analysis of the survey at the regional and field office levels will reveal specific areas to be identified for improvement.

## Methods of Communication with Flight Standards

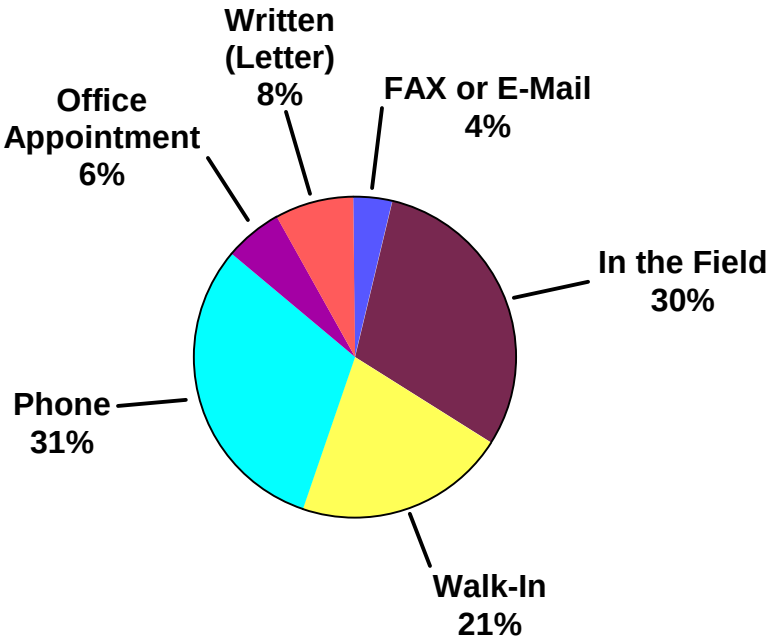



**Figure 11**

Meanwhile, Flight Standards has begun to use the Internet progressively to improve response times, preclude the necessity of office visits, ensure standardization, and reduce inspector workload. By publishing information on the Internet, Flight Standards provides consistent and timely information in response to frequent requests. For example, the Aviation Information Website (http://av-info.faa.gov/), a Flight Standards-sponsored site, is available for public viewing and contains information concerning air operators, aircraft, and application forms for aviation activities. Additionally, Flight Standards has a public website (http://www.faa.gov/avr/afshome.htm) allowing the public to view information about regulations, airworthiness directives, airshow information, and Frequently Asked Questions (available for part 61 of Title 14 Code of Federal Regulations only).

## CLARITY AND ACCURACY OF INFORMATION/COURTESY OF PERSONNEL

Many times communication with the FSDO may be unplanned or "spur of the moment" meaning that the FSDO has not had the advantage of preparing information prior to contact with a customer. The compilation of the results provided by all pilots with FSDO or aviation safety inspector contact during 1998 indicated positive opinions regarding the accuracy (76 percent) and clarity (80 percent) of information provided to them. This was derived from the responses to the following questions:

*Question 14: How much would you agree that the information you received was clearly transmitted to you?*
**80 percent Positive Responses**

*Question 15: How much would you agree that the information you received was accurate?*
**76 percent Positive Responses**

Further analysis under this section was not performed because of the highly positive responses.

## TIMELINESS OF SERVICE OR INFORMATION

Flight Standards believes it is important to provide service in a timely manner. This is especially critical when the service affects the livelihood of the requester. To determine how the pilot population viewed our customer service in regard to "timeliness," we asked the following questions:

*Question 17: How much would you agree that the service you received was timely?*
*Question 18: If the service was not timely, did the delay interfere with your commerce or ability to earn a living?*

## Timeliness of Service During 1998

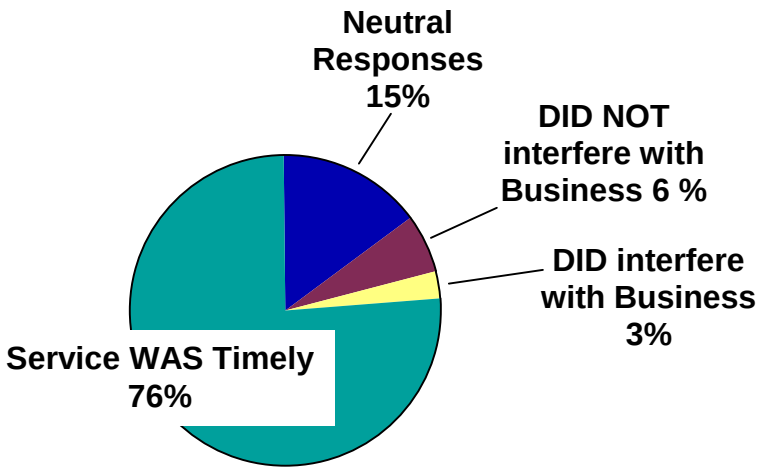



**Figure 12**

A sizable majority of the pilots, over three-quarters (76 percent) stated that their business with Flight Standards during 1998 was handled in a timely manner (e.g., 24 percent "strongly agreed" with the statement of timely response, while 52 percent "agreed"). Additionally, 6 percent of the respondents reported that even when service was not timely, it ***did not*** interfere with their commerce or ability to earn a living; 15 percent provided neutral opinions; and, 3 percent thought it ***did*** interfere with business. Figure 12 shows these categorizations.

The small percentage of pilots who reported a lack of timeliness (9 percent) appeared to be an overall endorsement of the timeliness of service provided by Flight Standards. However, we selected to further examine this issue. To do this, 1998 survey respondents were compared with pilot respondents who reported a lack of timeliness. Figure 13 shows a 4-to-1 ratio of pilots who flew using a Commercial or ATP certificate when compared to those who flew using a Private pilot certificate. In contrast, there was a 2-to-1 ratio for 1998 survey respondents subdivided into these same groups.

When asked if Flight Standards provided timely notices of action, only 10 percent of all survey respondents provided negative answers. This reflected a similar finding to that of timeliness of service. To correct this problem in the future, Flight Standards is exploring the feasibility of making notices of action available to pilots electronically and through the Internet.

## Pilots Reporting Lack of Timeliness in Service During 1998

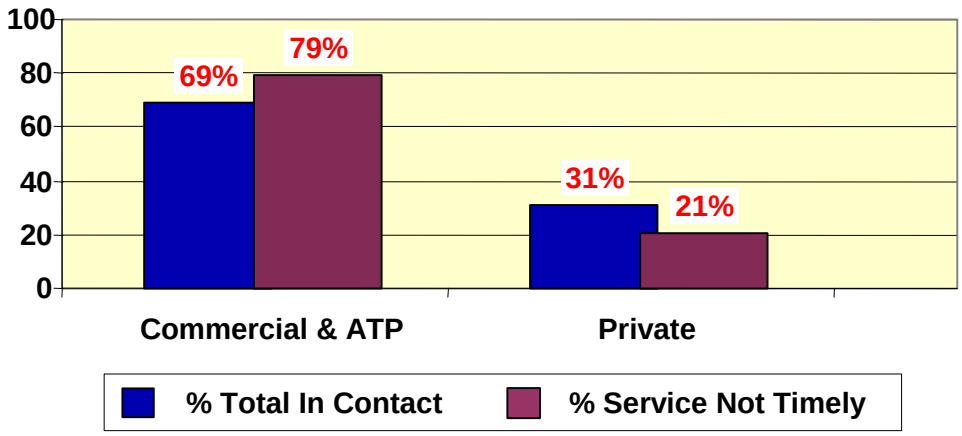



**Figure 13**

### CONSISTENCY OF INFORMATION

The inconsistency of information provided by the lack of standardization among FSDO's was highlighted by the 1993 survey. The section within this report entitled *Flight Standards Actions* presents a discussion of the actions we have taken to help correct this. However, this remains an area of concern, so we included questions in the current survey that addressed consistency of information provided by different FSDO's as well as different aviation safety inspectors. Of those pilots who had FSDO contact during 1998, 28 percent reported having contact with more than one FSDO. Focusing on the responses of this latter group, we determined a 7 percent rate of inconsistency in the information provided as illustrated in Figure 14.

# Consistency of Information between FSDO's

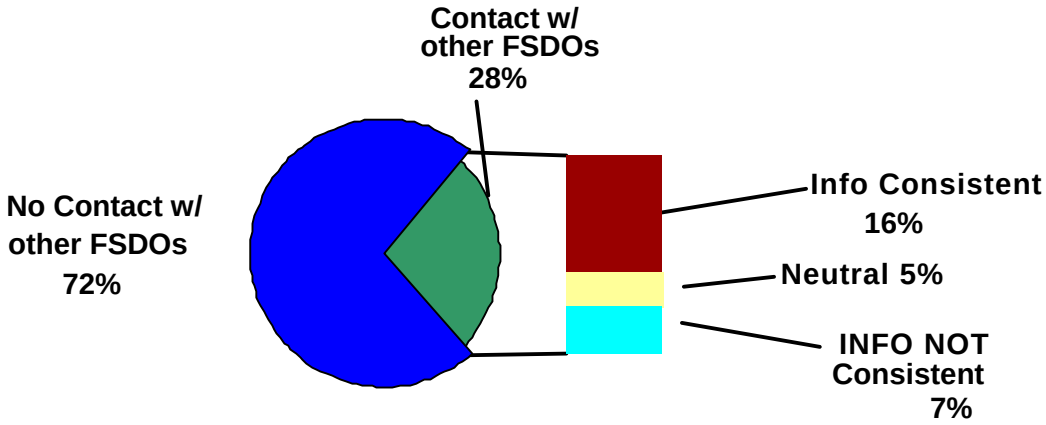
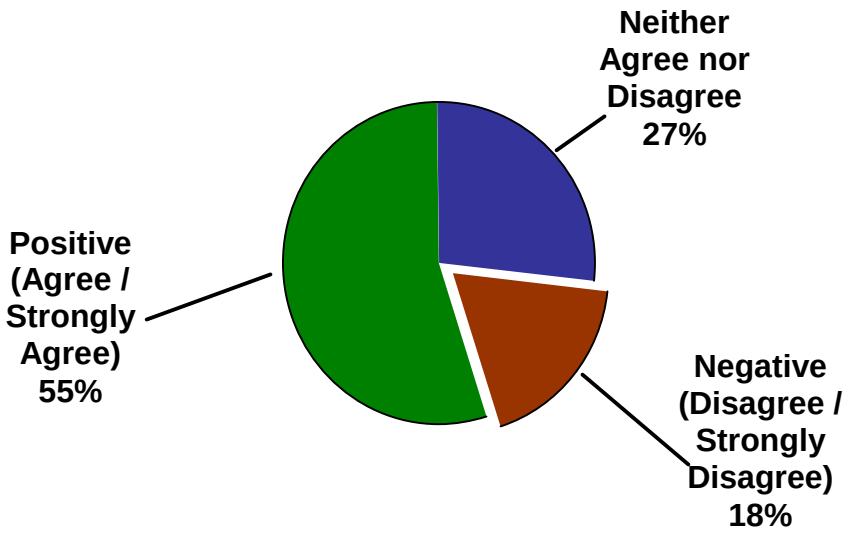



**Figure 14**

When we looked at standardization of information provided by different aviation safety inspectors, within either the same or different FSDO's, the reader sees in Figure 15 that a greater percentage (18 percent) reported that the information provided was inconsistent. It is important to note that this latter group included the 7 percent who sought information from more than one FSDO and reported inconsistencies. The 18 percent to which we previously referred were then further broken down by pilot certificate and compared with those in contact during 1998. Figure 16 shows that there were considerably fewer Private pilots and considerably more Commercial and ATP pilots who reported inconsistencies than were represented by all pilots with FSDO contact during 1998.

# Pilots With and Without FSDO Contact During 1998




"How much would you agree that the information provided to you by different FAA Inspectors is consistent?

**Figure 15**

# Respondents Reporting Inconsistencies Among Aviation Safety Inspectors

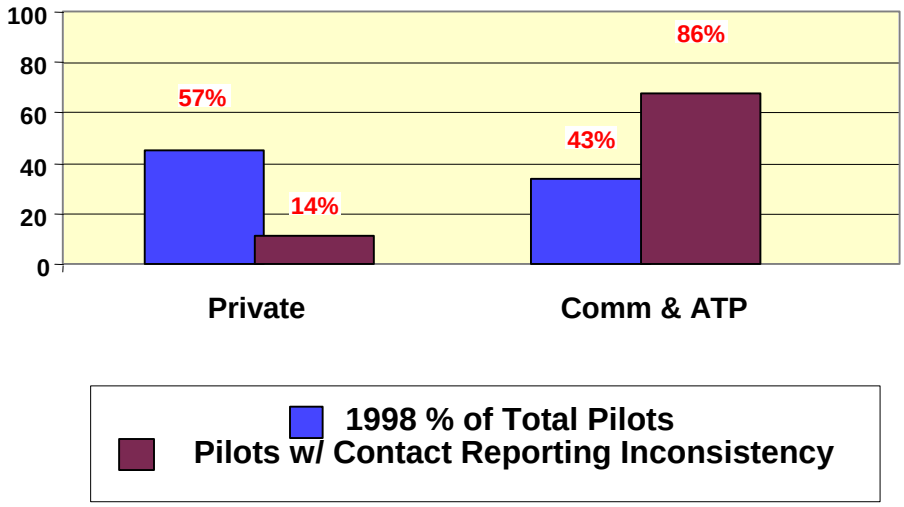



**Figure 16**

## ACCESS TO INFORMATION

The availability of information was greatly increased with the advent of the Internet. Since 1996, Flight Standards has maintained a website that provides the public with access to technical information. Even though 77 percent of the respondents reported that they had access to E-mail, the Internet, or both, 63 percent were unaware that technical information was available on the Flight Standards website.

**Respondents Who Visited the Flight Standards Website During 1998**

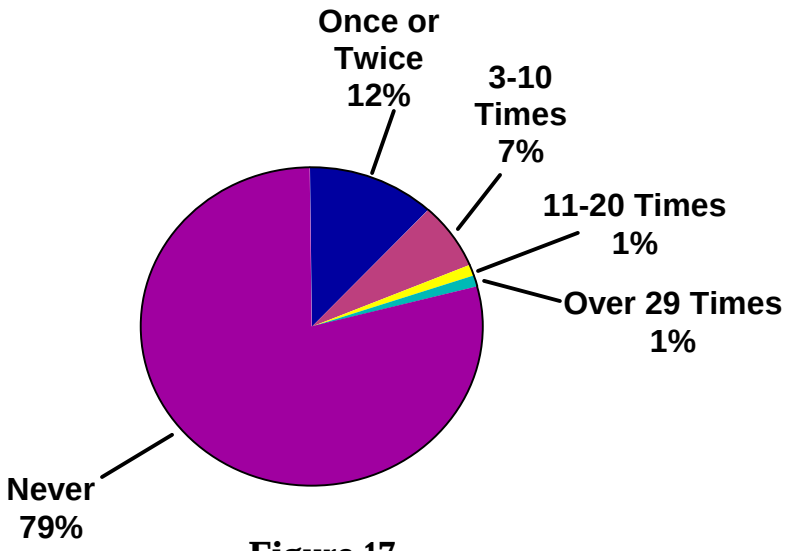



**Figure 17**

According to Figure 17, 21 percent of all pilot respondents actually visited the web page during 1998. When we examined the responses of the different pilot groups, we discovered that 44 percent of the Commercial and ATP aircraft pilots knew that technical information was available on the Internet, whereas, only 31 percent of the Private pilots recorded they were aware of the availability of such information. We assume that with the increase in the use of the Internet in general, more pilots currently access the Flight Standards website to obtain information; therefore, future surveys will continue to gather this type of data. This will help us determine what information will be made available to the general public via our website.

## TELEPHONE COMMUNICATION

Questions about telephone service were included in the survey at the particular request of FSDO managers who wanted to learn if customers noted any improvements to service since the 1993 survey and the installation of, or enhancements to, automated phone systems. Because there is no national standard for phone systems, regions and FSDO's have the latitude to decide how they will provide phone service. In Figure 18, the reader can readily see that, according to pilots who made telephone contact with the FSDO's during 1998, the predominant phone answering systems were manual (47 percent) and automatic (30 percent) call routing systems.

**FSDO Phone Services Encountered by Pilots During 1998**

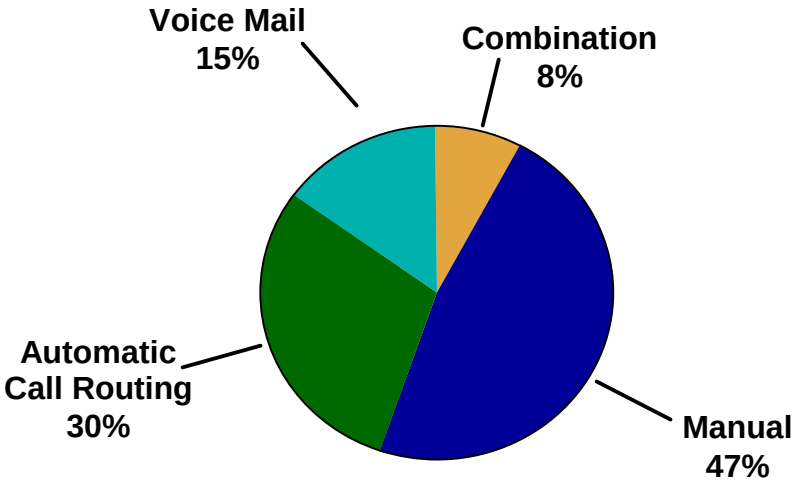



**Figure 18**

*Question 20: How much would you agree that if the system was voice mail or automatic routing the instructions were clear?* **77 percent**

*Question 21: If you were calling for a specific person, you reached that person easily?* **59 percent**

*Question 22: If you were not calling for a specific person, you easily found someone who could give you the service you needed?* **64 percent**

In response to the survey questions referenced above, the majority of pilots (77 percent) who used an automatic call routing or voice mail system were satisfied with the clarity of instructions. In addition, they reported that they were able to reach the person desired

with ease (59 percent). In contrast, 19 percent reported that they were unable to reach a specific person easily and 13 percent further told us that they were unable to find someone within the FSDO who could provide the requested service. Even though 64 percent provided positive and 13 percent provided neutral information on this same topic, the 13 percent negative response indicates an area for improvement. Further analysis of the data by region and FSDO may pinpoint specific offices that must correct this deficiency with improved phone service.

# AVIATION SAFETY PROGRAM

We have already noted in our discussions that overall Private pilots expressed higher levels of satisfaction with the services provided by Flight Standards than did Commercial and ATP pilots. We hypothesized that this level of satisfaction was proportional to participation in the Aviation Safety Program sponsored by Flight Standards. The Aviation Safety Program includes 160 Safety Program Managers (SPM) who have been producing and conducting safety seminars and clinics nationwide for pilots and AMT's since 1971 as well as facilitating the production of numerous audiovisual aids, safety pamphlets, Internet homepages, and other safety-related publications. The Aviation Safety Program is one of the main tools used to publicize the priority programs in the *Safer Skies: A Focused Agenda*. *Safer Skies* is a concentrated effort in partnership with industry to reduce aviation accidents fivefold over the next decade. Though available to all pilots, the majority of attendees are general aviation pilots. Significant gains in the general aviation safety record have been attributed to the Aviation Safety Program. In fact, 1999 was the safest year for general aviation since 1980.

Other Flight Standards surveys of our customers have shown consistently that the program is effective and efficient in providing airmen with the knowledge of current and new regulatory requirements, technological changes, and changes in safety responsibilities of today's National Airspace System. However, the 1998 Customer Satisfaction Survey indicated that less than half (45 percent) of the respondents reported that they attended Flight Standards-sponsored safety seminars during 1998 with 15 percent having attended more than one. Since an average of 14,000 safety seminars are held per year with an average class size between 45-60 attendees, it is quickly apparent that the pilots who responded to this survey are not the only ones who attend these seminars.

**Highest Level of WINGS Reported**

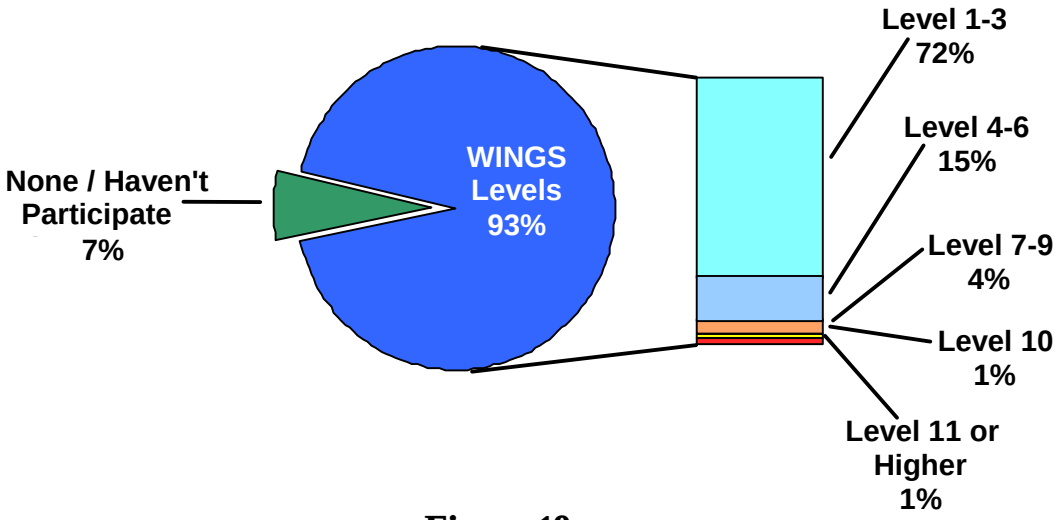



**Figure 19**

**WINGS**

As part of the Aviation Safety Program, the Pilot Proficiency Award Program is informally known as WINGS. Flight Standards encourages pilots to establish a regular recurrent training program and invites them to participate in WINGS. The objective of this program is to provide pilots with the opportunity to establish and participate in recurrent training programs that include attending Aviation Safety Program seminars. The second aspect of this recurrent program is conducted in an aircraft, not a classroom, and includes 1 hour each of instrument, takeoff and landing, and unusual attitude training. Safety Program Managers review the accidents, incidents, and complaints within their districts and design seminars based on customer needs. Any pilot holding a recreational pilot certificate or higher and a current medical certificate, as required, may participate in WINGS, a program that includes 20 phases or levels of training. Upon completion of each of the first ten levels, pilots become eligible to wear and are presented with a lapel pin, resembling wings, and a certificate of completion. Forty-six percent of the survey respondents reported that they participated in WINGS with 72 percent of these participants having attained Level 1-3 as the highest level achieved. This is illustrated in Figure 19.

## Comparison Between All Respondents and Those Attending Safety Seminars During 1998

| SURVEY QUESTION | All Respondents in Survey: Aware & Have Participated: | 1998 Safety Seminar Attendees in Survey: Aware & Have Participated: |
|---|---|---|
| Q24: Are you aware of, or have you participated in, the WINGS program? | 33% | 50% |
| Q25: Highest level of WINGS = Over 3 | 22% | 26% |
| Q26: How much do you agree that Safety Seminars make safer pilots? | 88% Positive | 94% Positive |
| Q27: Do you recommend Safety Seminars to other pilots? | Yes: 70% | Yes: 90% |
| Q28: Will you attend more Safety Seminars in the next year? | Yes: 52% | Yes: 81% |
| Q29: Are you aware that you can become an Aviation Safety Counselor? | Yes: 18% | Yes: 23% |

**Table 3**

## PILOTS WHO ATTENDED SAFETY SEMINARS DURING 1998

Those pilots who attended a safety seminar during 1998 provided greater positive rates as illustrated in Table 3. We attributed the 94 percent reporting that they agreed the seminars made safer pilots to the continued effort by Flight Standards in general, and the Safety Program Managers in particular, to tailor the programs they provide to the interests and particularities of their districts. This was further evidenced in the approximately 30 percent difference between the total population who said that they would attend safety seminars in the next year (52 percent) and 1998 safety seminars attendees who reported that they would attend future safety seminars (81 percent).

## SAFETY COUNSELOR PROGRAM

Aviation Safety Counselors are chosen by the Safety Program Managers. Counselors from the local pilot community assist Safety Program Managers in giving seminars designed to broaden and refresh technical knowledge. There are over 3,000 volunteers serving as counselors, sharing their technical expertise and professional knowledge with the aviation community. Since only 18 percent of all respondents reported that they knew that they could become counselors, Flight Standards has made a commitment to publicize this program and its benefits.

**Attendance of Safety Seminars and Participation in WINGS**

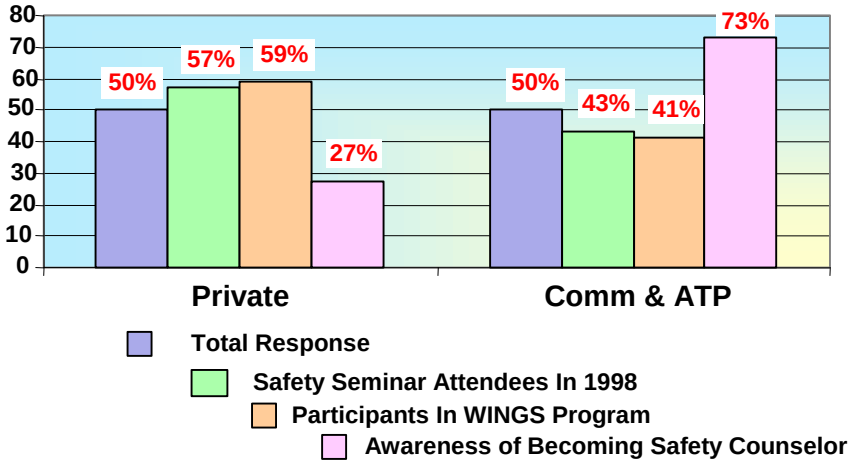



**Figure 20**

## PARTICIPATION IN AVIATION SAFETY PROGRAM BY PILOT CERTIFICATE

If we categorize the information provided above in this section by pilot certificate, Figure 20 shows the greatest level of participation was among private pilots. A much greater percentage of Commercial and ATP pilots (73 percent) reported knowing that they could become Aviation Safety Counselors. In contrast, appreciably fewer private pilots (27 percent) reported knowing that they could become Aviation Safety Counselors.

## QUALITY OF SAFETY SEMINARS

The pilots responded at a highly positive rate to questions regarding the Aviation Safety Program. Pilots perceived this program to be effective as was evident in their responses to the following questions:

*Question 26: How much do you agree that safety seminars make safer pilots?*
*Question 27: Do you recommend safety seminars to other pilots?*
*Question 28: Will you attend more safety seminars in the next year?*

We interpreted the high positive response rate as to whether the safety seminar made safer pilots (88 percent) as an endorsement of the quality of both the content and presentation of the seminars. If either were lacking, pilots would neither attend nor recommend the seminars to other pilots. Fifty-two percent reported that they would attend a safety seminar in the next year while 38 percent reported that they did not know if they would attend additional safety seminars during the next year. Only 10 percent reported that they would ***not*** attend more safety seminars in the next year.

## Private vs. Commercial and ATP Pilots

| CUSTOMER SATISFACTION SURVEY QUESTION | Commercial and ATP Pilot Respondents | Private Pilot Respondents |
|---|---|---|
| Q23: Total percent attending local FAA-sponsored Safety Seminars in 1998 | 39% | 49% |
| Q24: Total percent aware of, or have participated in, the WINGS program | 30% | 34% |
| Q25 from Q24: Highest level of WINGS >3 | 28% | 18% |
| Q26: Percent agreeing that Safety Seminars make safer pilots | 85% | 90% |
| Q27: Percent recommending Safety Seminars to other pilots | 69% | 72% |
| Q28: Percent that will attend more Safety Seminars in the next year | 42% | 62% |
| Q29: Percent that are aware that they can become an Aviation Safety Counselor | 27% | 10% |

**Table 4**

## COMPARISON OF PILOTS BY CERTIFICATE

Awareness of and participation in the Aviation Safety Program is not limited to Private pilots. Commercial and ATP pilots do participate, although there is a 10 percent lower rate of attendance. Forty-nine percent of the Private pilots reported attending seminars in 1998, while only 39 percent of the Commercial and ATP pilots attended similar seminars. Furthermore, 62 percent of Private pilots said they would attend a seminar during the next year (1999), while only 42 percent of the Commercial and ATP pilots said they would attend during this same time period. Table 4 provides further analysis of the responses of these two groups of pilots.

# FLIGHT REVIEWS

Flight reviews[8] are designed to verify that a pilot possesses the knowledge, skill, and ability required to operate an aircraft. The Federal regulations establish the requirement for pilots to have initial flight reviews when first receiving their pilot certificates. The regulations, specifically 14 CFR section 61.56, further require subsequent flight reviews on a recurring basis to verify that a pilot continues to possess the necessary skills or proficiency to operate the aircraft safely. If they are seeking a new rating, they must have a practical test for that new set of skills. Commercial pilots and those with ATP ratings are required to have flight reviews more often.

## Flight Reviews During 1998

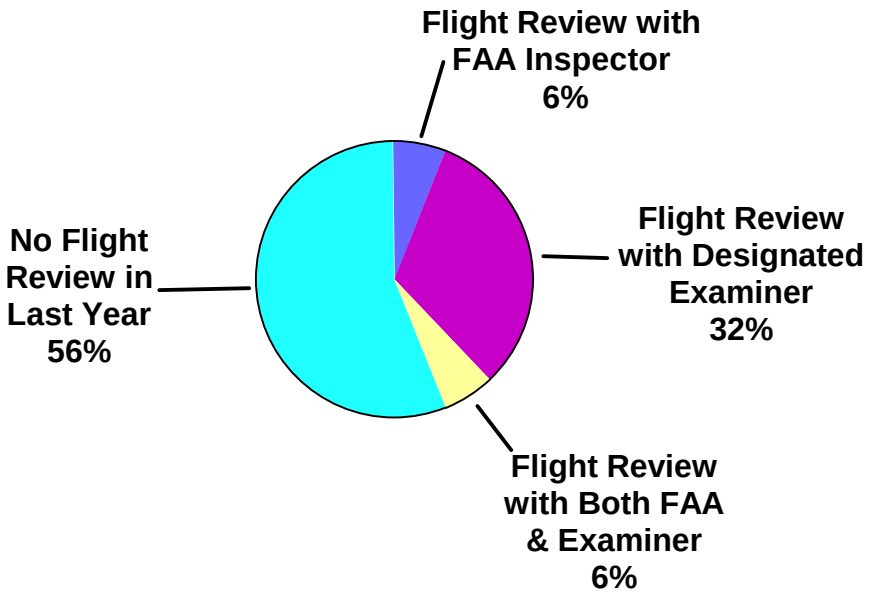



**Figure 21**

In addition to qualified Flight Standards aviation safety inspectors, designated pilot examiners, commonly referred to as designees, administer flight reviews. Designees are not

[8] Though the 1998 Survey used the term "flight check," the current term is "flight review." This encompasses many areas. Practical tests are administered for grade of certificate, additional privileges (such as instrument rating), and types. Proficiency reviews are related to operations such as FAR Part 121, 133, 135, 137, and 141 operators and air agencies. These reviews (e.g., flight reviews for instrument proficiency) may be done by Certificated Flight Instructors, Designated Pilot Examiners, or aviation safety inspectors while recurrent proficiency reviews for large and turbojet aircraft are performed many times by check airmen.

employed by the FAA but are authorized by Flight Standards to conduct flight reviews on behalf of the agency. As seen in Figure 21, 44 percent of the total survey respondents received flight reviews during 1998. Designees tested 32 percent; only 6 percent of the respondents received flight reviews from aviation safety inspectors; and an additional 6 percent received flight reviews from both a designee and an aviation safety inspector. Thirty-eight percent of Commercial pilots had a flight review with a designee, and 16 percent had a flight check with an aviation safety inspector. An equal percentage had a flight check with both an inspector and a designee. Finally, 28 percent reported that they had no flight reviews during 1998. On the other hand, nearly half (45 percent) of the Private pilots reported that they had a flight review with a designated examiner, 8 percent with an inspector, and 39 percent had one with both an aviation safety inspector and a designee. Only 8 percent reported not having a flight review at all. The survey did not ask pilots whether or not they had a flight review with a Certificated Flight Instructor. Since a flight review with a Certificated Flight Instructor entails little or no involvement with Flight Standards personnel, we assumed this explained the small percentage of negative responses.

## QUALITY OF FLIGHT REVIEWS

To determine the level of satisfaction pilots had with the flight reviews they received, we examined the responses of the pilots who reported having flight reviews during 1998 to the following questions:

*Question 31: How much would you agree that the results {of the flight check} reflected your knowledge accurately?* **94 percent Positive Responses**

*Question 32*: *How much would you agree that the person giving you the flight check acted courteously?* **96 percent Positive Responses**

*Question 33*: *How much would you agree that the person giving you the flight check explained the results clearly to you?* **93 percent Positive Responses**

*Question 34*: *How much would you agree that the person giving you the flight check represented the FAA favorably?* **89 percent Positive Responses**

*Question 35*: *How much would you agree that the person giving you the flight check seemed knowledgeable and familiar with the type of aircraft and operational environment in which the test was conducted?* **92 percent Positive Responses**

Flight Standards interpreted the highly favorable response rate indicated above as an overall pilot satisfaction with the quality of flight reviews regardless of whether they were administered by a designated examiner or aviation safety inspector. Further analysis at the regional and field levels may indicate any anomalies that must be addressed and corrected.

# ACCIDENTS, INCIDENTS AND COMPLIANCE

Only 1 percent of the respondents reported they were in an aviation accident during 1998 and only 2 percent reported involvement in an incident. Although Flight Standards offers a remedial training program, only 35 percent of the respondents from this small group realized this training could supplant other means of compliance. In *Aviation Profile of the Respondent*, we discussed the difference between the investigation of a possible violation stemming from an accident or incident and an enforcement action. To restate the point, an investigation, particularly of an incident, does not always result in an enforcement action. However, if a violation has occurred, remedial training is available to a Private pilot as an alternative to receiving a sanction, a monetary penalty, or loss of his or her certificate. Whether or not the training is offered depends on the nature and severity of the violation and the discretion of the aviation safety inspector. When remedial training is substituted as an alternative, it is documented in the airman's file at the FSDO and the investigation is closed by administrative action.

## SANCTIONS

An aviation safety inspector sends a Letter of Investigation (LOI) to a pilot when he or she is suspected of having committed a violation of the regulations. Letters include specific dates, times, and descriptions of the events in question as well as the maximum fines and penalties for the violation. The person or company being investigated is then given up to 30 days to respond to the letter. Respondents who had received an LOI in the past 3 years were asked to answer questions related to the sanction(s). This group was comprised of 2,532 respondents or about 8 percent of the total number of survey respondents. The following are the survey questions related to sanction(s):

*Question 45: "How much would you agree that the sanction was appropriate for the violation?"*

*Question 46: "How much would you agree that Flight Standards personnel acted courteously [when giving the violation]?*

Sixty-five percent of the respondents were neutral on the question addressing the appropriateness of the sanction for the violation; 22 percent agreed that it was appropriate for the violation; and 14 percent, or 345 of the total respondents, disagreed. Since the latter represented such a small number of pilots, we did not draw any statistical conclusions about this group.

## BEHAVIOR OF FLIGHT STANDARDS PERSONNEL

Most respondents were neutral in providing input on Flight Standards employees acting courteously when giving violations. Thirty-three percent of the pilots agreed that Flight Standards personnel acted courteously, and only 7 percent disagreed with 60 percent neutral on the subject. It was not possible to determine why there was such a large neutral response. However, analysis of survey data at the regional and FSDO levels may shed some light on the issue.

# FLIGHT STANDARDS ACTIONS

The analysis of the results of the Customer Satisfaction Survey provided specific information on pilot perception of the customer service provided by Flight Standards. The focus areas of *Communication*, *Aviation Safety Program*, *Flight Reviews*, *Access to Information* and *Accidents, Incidents and Compliance* reflected a need for improvement. As an organization, we must not only develop interventions to affect improvement, we must continue to sustain programs and services that meet the needs and expectations of our customers. Actions corresponding to each focus area of the survey are grouped below according to focus areas in the 1998 customer survey.

## COMMUNICATION AND ACCESS TO INFORMATION

Analyzing all the data collected under this focus area, Flight Standards concluded that though the composite level of satisfaction reported by pilots communicating with the FSDO's was relatively high, there are two general areas in need of improvement. Despite the actions we have taken since the 1993 survey, our customers have told us that we must further our strides to improve the standardization or consistency of information provided in both internal and external communication. After the survey results of the extensive 1998 survey are analyzed at the regional and field office levels, it will be possible to identify specific corrections to be made at identified locations.

Flight Standards has begun already to take measures at the national level to remedy or improve customer satisfaction under the general categories of external and internal communications. To address difficulties in the first category, Flight Standards includes communication in indoctrination training courses mandatory for all newly hired aviation safety inspectors. This course material, contained in Professionalism for Aviation Safety Inspectors (Course 12030), focuses 34 hours of training in communications. It presents general concepts in communicating on-the-job and professional conduct required of all aviation safety inspectors. Topics include oral and written communication, interviewing concepts, conflict management, listening skills, teamwork, and critical thinking processes. The workshops provide an opportunity to practice effective presentation skills and conference leadership.

Flight Standards management officials also are taking actions to correct inadequate or unsatisfactory communication with customers through supervisory counseling and guidance. Courtesy, promptness, and accuracy are stressed as national standards. If an unacceptable situation comes to the attention of management, it is reviewed immediately and any necessary corrective action taken. The 1999 Flight Standards Business Plan included an initiative to address accountability: *Goal 2: Infrastructure, Initiative 2.8 Implement System of Accountability for All of Flight Standards.* In order to affect such a change, Flight Standards established an Accountability Team comprised of representatives from headquarters, regional, and field office management teams. An implementation plan for a system of accountability has been finalized; its key components are to promote efficiently the accomplishment of the Flight Standards mission and integrate the mission through the

business plan, performance management agreements, and reward systems. In addition to the task of integration and promotion, every employee must understand that he or she is accountable to both internal and external customers. Effective training and communication are critical elements in the success or failure of the system.

To facilitate the availability of accurate and timely information, Flight Standards supports the use of the Internet as the most cost effective way to release and distribute data. This trend in communications continues to expand; nearly three-quarters of the respondents reported having access to the Internet. There has been FAA-wide efforts to improve the agency's public websites (http://www.faa.gov) recognized by Federal Computer Week (April 24, 2000) as one of the "10 Sites to Watch;" sites that were "paving the way to digital government." In addition, the Britannica.com Internet Guide, which strives to include only the best websites, recently awarded three stars (or a rating of "excellent") to the FAA website. The criteria for the award are accuracy, usefulness, depth and breadth of information; credentials and authority of the author or publisher; quality of design, graphics, and multimedia; ease of navigation; and timeliness of revision. Accessible through the FAA website or directly at http://www.faa.gov/avr/afshome.htm, the Flight Standards website in particular provides a wealth of information of interest to the reader. Through our website the reader can gain information from the aviation safety inspector handbooks, Federal Aviation Regulations, and advisory circulars. He or she can access the District Office Locator for employee listings, telephone numbers, and addresses. Considerable information is also available concerning general aviation, aviation maintenance, air transportation, and international aviation. From the Flight Standards website, interested readers have access to commonly used FAA aviation forms, safety-related information pertaining to aircraft, airlines, and aviation-related schools. Our website continues to grow and improve as additional information of an interest to the general, as well as the aviation specific, public is made available.

Assuming that standardization or consistency of information provided is directly linked to communication, it is readily apparent that inadequacies in internal communication negatively affect standardization. The adequate and timely communication or distribution of information between Flight Standards policy offices located in headquarters and the field level offices is critical to the consistency and accuracy of information provided to our external customers. Therefore, Flight Standards has expedited the distribution of policy information and requirements by utilizing Intranet capabilities available to all Flight Standards employees via their office computer workstations. We are providing immediate electronic access to policy documents, regulations, hyperlinks to data bases, and industry sites. Future plans for the website include an internal organizational chat room and a message board to permit employees to get answers about technical aviation subjects.

Flight Standards understands the importance of our national standard for prompt and courtesy communication and providing accurate and appropriate information to all our internal and external customers. Less than this standard will not be accepted. Flight Standards will continue to strive to correct areas of communication weakness. We have begun to examine critically the processes by which we accomplish our work. Through an extensive effort entitled "Business Process Improvement" (BPI), we are reviewing and redesigning our core business processes to facilitate our mission needs in a more

efficient manner. Based on the principles of Performance Quality Management Improvement, the BPI effort will create a business environment to ensure a better integration and communication within Flight Standards and with our customers.

## AVIATION SAFETY PROGRAM

The Aviation Safety Program discussed earlier is one of the most visible and pro-active safety initiatives sponsored by Flight Standards in partnership with industry. Although the results of accident and incident prevention are difficult to quantify, in the last 10 years, the general aviation accident rate has been declining, with 1999 the safest year on record. This steady decline in the accident rate is growing proof that our pro-active approach to providing safety information to the aviation community contributes to saving lives.

The 5-year strategic plan for the Aviation Safety Program calls for further development of partnerships with industry organizations (e.g., Experimental, Warbird, Balloon, and Ultralight). The Aviation Safety Program will continuously develop the safety counselor program. Recruitment of the best and most safety-conscious pilots for the Safety Counselor Program will become a priority for Safety Program Managers. Because Safety Counselors give the majority of safety seminars, this will increase the number and maintain the quality of seminars given during the year. While this addresses an expansion of the base of presenters and counselors, the Aviation Safety Program also intends to extend its customer base. Flight Standards plans to do this by providing new media-based safety programs, further identifying members of its customer base, and marketing its safety programs to this targeted audience. The Aviation Safety Program will also be marketed to internal customers such as other organizations within the Federal Aviation Administration and the Department of Transportation. If possible, the Aviation Safety Program will be extended to four groups within the aviation community: air carriers, repair stations, part 141/147 schools, and individual pilots and mechanics (current Aviation Safety Program participants). Another aspect of the strategic plan is the reduction of human factors-related errors in aviation. The Aviation Safety Program anticipates a reduction in human factors errors by developing and implementing human factors specific training sessions.

## FLIGHT REVIEWS

To maintain the high quality of flight reviews, Flight Standards annually observes designated examiners while they are conducting flight reviews. In addition, Flight Standards provides the training once every 2 years so that they can remain aware of changes in regulations and standards. Flight Standards is dedicated to developing and conducting a variety of seminars for designated examiners. Examples of seminars are: Recurrent Pilot Examiner Standardization and Recurrent Technical Personnel Examiner Standardization. Such seminars occur around the country so that designees are trained and current in the geographic regions in which they work. Additionally, Flight Standards distributes an information and guidance kit that contains specific directives and documents necessary for designees to perform their authorized functions. Furthermore, Flight Standards contributes to standardization through publishing the quarterly Designee Newsletter and the monthly Aviation Maintenance Alerts (AC 43-16).

## ACCIDENTS, INCIDENTS AND COMPLIANCE

Even though the majority of pilots recorded neutral responses to this focus area, Flight Standards is not overlooking the opportunity to improve associated customer service. From the point of view of aviation safety inspector training, the emphasis is on preventing accidents by learning and teaching mitigation of risk factors. Flight Standards reinforces the attitude of accident prevention by having remedial training as an alternate means of compliance to violations.

# CONCLUSION

The information provided by pilots in response to the Customer Satisfaction Survey outlined the need for improvements in communication and the standardization of information provided at all organizational levels: headquarters, regional, and field office. If we revisit the organizational intention of conducting a customer survey, then we realize it was to gain the customers' perspective and improve service accordingly. We see not only the need to emphasize communication and standardization for improvement; we realize the specific areas in which these needs are manifest.

Though no single question or category of questions on the survey instrument returned a highly negative rate of response, it is important to remember that we must remain committed to continuous improvement. The findings of the Customer Satisfaction Survey are assisting the organization to prioritize areas of change based on the information provided to us directly by our customers. As we compile the survey findings specific to our regional and field offices, we will be able to identify particular areas in which we must improve our customer service. Our commitment to developing interventions and solutions will be documented in performance plans developed annually at the national, regional, and field office levels. Our accomplishment of these interventions will be published annually, and future customer surveys will serve as performance measures to determine our rate of success.

# APPENDIX I

# APPENDIX II